

### REMARKS/ARGUMENTS

The rejections presented in the Office Action dated May 24, 2006 (hereinafter Office Action) have been considered. Claims 1-48 and 80-100 remain pending in the application. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

Claims 1-9, 14-18, 22-34, 37, 39-42, 45, 47-48, 80-83, 85-86, 88-96, 98 and 100 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,483,969 to *Testerman et al.* (hereinafter "*Testerman*") in view of U.S. Publication 2002/0193697 by *Cho et al.* (hereinafter "*Cho*").

Applicants respectfully assert that the combination of *Testerman* and *Cho* fails to support a *prima facie* case of obviousness. The prior art combination 1) fails to disclose all the claim limitations, 2) there would be no motivation to combine the references as proposed by the Examiner, and 3) there is no reasonable expectation that any such combination or modification would successfully produce an invention as set forth in Applicants' claims. Because the asserted combination does not support *prima facie* obviousness, the rejections must be withdrawn.

Independent claims 1, 80, and 100 include, in some form, predicting disordered breathing based on detected conditions and delivering therapy to mitigate the predicted disordered breathing. Neither *Testerman* nor *Cho* teach or suggest at least these claim limitations.

*Testerman* describes stimulation of the upper airway muscle to relieve airway obstruction. The stimulation is synchronized with the inspiratory phase of the patient's respiratory cycle. To effect this synchronization, *Testerman* predicts when the inspiratory phase of the patient's breath cycle will occur. In contrast to the limitations recited in Applicants' claims, *Testerman* does not teach or suggest prediction of disordered breathing.

The Office Action refers to col. 11 lines 46-62 and col. 13 lines 41-57 of *Testerman* as teaching "treatment of sleep apnea by predicting inspiratory phase of the patient's respiratory cycle." Applicants' claims recite ***predicting disordered breathing***, not predicting phases of a breath cycle as discussed in *Testerman*. The analysis set forth in the

Office Action is erroneous because 1) predicting inspiratory phase is clearly not the same as predicting disordered breathing, and 2) there is no motivation to modify *Testerman* to encompass predicting disordered breathing based on the prediction of inspiratory phase. The Office Action does not provide any evidence to support a motivation to modify *Testerman* in the manner suggested. Furthermore, *Testerman* is also silent with regard to treatment based on the prediction of disordered breathing. *Testerman* only describes a method for treating disordered breathing by stimulation during the inspiratory phase of breath cycles.

*Cho* does not overcome the deficiencies of *Testerman* with regard to any teaching or suggestion of these missing claim limitations. Applicants reassert arguments made in their previous Office Action responses regarding *Cho*'s failure to teach prediction of disordered breathing or therapy based on disordered breathing prediction.

Because the asserted combination of references fails to teach or suggest several of the above-identified limitations, and because the asserted combination does not provide a sufficient basis to support a reasonable expectation of success or the requisite suggestion or motivation to combine or modify the references in the manner suggested by the Examiner, Applicants respectfully assert that the combination of references cannot support *prima facie* obviousness of Applicants' subject matter recited in independent claims 1, 80, and 100 and claims 2-9, 14-18, 22-34, 37, 39-42, 45, 47-48, 81-83, 85-86, 88-96, 98 which respectively depend therefrom.

Claims 19-21, 84 and 97 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Testerman* in view of U.S. Patent No. 5,335,657 to *Terry, Jr. et al.* Claims 35-36 and 38 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the *Testerman* in view of U.S. Patent No. 6,366,813 to *DiLorenzo*. Claims 10-13 and 87 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Testerman* in view of U.S. Patent No. 6,398,728 to *Bardy*. Claims 43-44, 46 and 99 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Testerman* in view of U.S. Patent No. 6,272,377 to *Sweeney et al.*

Each of the above-listed obviousness rejections rely on *Testerman* to teach prediction of disordered breathing and therapy delivery based on the prediction of disordered breathing. As set forth in arguments above, *Testerman* does not teach or suggest at least these limitations which are included in some form in all the claims. The references that are combined with *Testerman* also fail to teach or suggest the missing limitations. The case for *prima facie* obviousness fails under the same rationale presented above with regard to the independent claims.

In addition, Applicants reassert arguments made in the previous Office Action responses with regard to the Examiner's analysis of optimum or workable ranges in connection with claims 19-21.

Claims 1-48 and 80-100 stand provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-97 of copending application no. 10/643,203. Claims 1-48 and 80-100 stand provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-27 and 33-96 of copending application no. 10/642,998 in view of U.S. Patent No. 6,928,324 to *Park et al.* Claims 1-48 and 80-100 stand provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-102 of copending application no. 10/643,016 in view of *Park et al.*

Applicants respectfully assert that, in view of arguments made above, the Examiner is compelled to withdraw the substantive art rejections of the claims. Once withdrawn, the only rejection remaining in the subject application is the provisional obviousness-type double patenting rejections. In view of MPEP § 804 I(B), Applicants respectfully request that the provisional obviousness-type double patenting rejections be withdrawn and that the subject application be permitted to issue as a patent.

It is to be understood that Applicants do not acquiesce to Examiner's characterization of the asserted art or Applicants' claimed subject matter, nor of the Examiner's application of the asserted art or combinations thereof to Applicants' claimed subject matter. Moreover, Applicants do not acquiesce to any explicit or implicit statements or conclusions by the Examiner concerning what would have been obvious to

one of ordinary skill in the art, obvious design choices, alternative equivalent arrangements, common knowledge at the time of Applicants' invention, officially noticed facts, and the like. Applicants respectfully submit that a detailed discussion of each of the Examiner's rejections beyond that provided above is not necessary, in view of the clear absence of teaching and suggestion of various features recited in Applicants' pending claims.

Applicants, however, reserve the right to address in detail the Examiner's characterizations, conclusions, and rejections in future prosecution.

Authorization is given to charge Deposit Account No. 50-3581 (GUID.103PA) any necessary fees for this filing. If the Examiner believes it necessary or helpful, the undersigned attorney of record invites the Examiner to contact her to discuss any issues related to this case.

Respectfully submitted,

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By:



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